FILED BY ENTERPRISE PRODUCTS PARTNERS L.P.
PURSUANT TO RULE 425 UNDER THE SECURITIES ACT OF 1933, AS AMENDED
AND DEEMED FILED PURSUANT TO RULE 14A-12 AND RULE 14D-2(b)
OF THE SECURITIES EXCHANGE ACT OF 1934

SUBJECT COMPANY: GULFTERRA ENERGY PARTNERS, L.P. COMMISSION FILE NO.: 1-11680

ENTERPRISE PRODUCTS PARTNERS L.P. ("ENTERPRISE") HAS FILED A FORM S-4 REGISTRATION STATEMENT, AS AMENDED, WITH THE SECURITIES AND EXCHANGE COMMISSION (THE "SEC") REGARDING ITS PROPOSED MERGER WITH GULFTERRA ENERGY PARTNERS, L.P. ("GULFTERRA"). ENTERPRISE AND GULFTERRA HAVE ALSO FILED OTHER RELEVANT DOCUMENTS WITH THE SEC. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ CAREFULLY THE FORM S-4 REGISTRATION STATEMENT, AS AMENDED, AND OTHER RELEVANT DOCUMENTS, BECAUSE THEY CONTAIN IMPORTANT INFORMATION REGARDING ENTERPRISE, GULFTERRA AND THE MERGER. A DEFINITIVE JOINT PROXY STATEMENT/PROSPECTUS WILL BE SENT TO SECURITY HOLDERS OF ENTERPRISE AND GULFTERRA SEEKING THEIR APPROVAL OF THE MERGER TRANSACTIONS. INVESTORS AND SECURITY HOLDERS MAY OBTAIN A FREE COPY OF THE FORM S-4 REGISTRATION STATEMENT, AS AMENDED, AND OTHER RELEVANT DOCUMENTS CONTAINING INFORMATION ABOUT ENTERPRISE AND GULFTERRA AT THE SEC'S WEB SITE AT WWW.SEC.GOV. COPIES OF THE DEFINITIVE JOINT PROXY STATEMENT/PROSPECTUS AND THE SEC FILINGS THAT ARE INCORPORATED BY REFERENCE IN THE DEFINITIVE JOINT PROXY STATEMENT/PROSPECTUS MAY ALSO BE OBTAINED FOR FREE BY DIRECTING A REQUEST TO THE RESPECTIVE PARTNERSHIPS.

ENTERPRISE AND GULFTERRA AND THE OFFICERS AND DIRECTORS OF THEIR RESPECTIVE GENERAL PARTNERS MAY BE DEEMED TO BE PARTICIPANTS IN THE SOLICITATION OF PROXIES FROM THEIR SECURITY HOLDERS. INFORMATION ABOUT THESE PERSONS CAN BE FOUND IN ENTERPRISE'S AND GULFTERRA'S RESPECTIVE ANNUAL REPORTS ON FORM 10-K FILED WITH THE SEC AND IN THE SCHEDULE 13D FILED BY DAN L. DUNCAN WITH THE SEC, AS AMENDED ON DECEMBER 18, 2003 AND JUNE 2, 2004, AND ADDITIONAL INFORMATION ABOUT SUCH PERSONS MAY BE OBTAINED FROM THE FORM S-4 REGISTRATION STATEMENT, AS AMENDED, AND THE DEFINITIVE JOINT PROXY STATEMENT/PROSPECTUS.

In a joint press release issued on June 23, 2004, Enterprise and GulfTerra announced that each will hold a special meeting of their common unitholders on July 29, 2004 to vote on the approval of the proposed merger of Enterprise and GulfTerra. Enterprise's registration statement on Form S-4, as amended, including the joint proxy statement/prospectus for the special meeting, was declared effective by the Securities and Exchange Commission on June 22, 2004. The joint proxy statement/prospectus for the meetings is expected to be mailed on or about June 24, 2004, to Enterprise and GulfTerra unitholders of record as of the close of business on June 22, 2004. A copy of the joint press release is incorporated into this filing under Rule 425.





ENTERPRISE AND GULFTERRA ANNOUNCE UNITHOLDER MEETINGS TO APPROVE MERGER

Houston, Texas (Wednesday, June 23, 2004) Enterprise Products Partners L.P. (NYSE: EPD) and GulfTerra Energy Partners, L.P. (NYSE: GTM) announced that on July 29, 2004, Enterprise and GulfTerra will each hold a special meeting of its common unitholders to vote on the approval of the merger of the two publicly traded partnerships. Enterprise's registration statement on Form S-4, including the joint proxy statement/prospectus for the special meeting was declared effective by the Securities and Exchange Commission on June 22, 2004. The joint proxy statement/prospectus for the meetings is expected to be mailed on or about June 24, 2004, to Enterprise and GulfTerra unitholders of record as of the close of business on June 22, 2004.

Enterprise Products Partners L.P. is the second largest publicly traded, midstream energy partnership with an enterprise value of approximately \$7.0 billion. Enterprise is a leading North American provider of midstream energy services to producers and consumers of natural gas and NGLs. Enterprise's services include natural gas transportation, processing and storage and NGL fractionation (or separation), transportation, storage and import/export terminaling.

GulfTerra Energy Partners, L.P. is one of the largest publicly traded master limited partnerships with interests in a diversified set of midstream assets located both offshore and onshore. Offshore, the partnership operates natural gas and oil pipelines and platforms and is an industry leader in the development of midstream infrastructure in the Deepwater Trend of the Gulf of Mexico. Onshore, GulfTerra is a leading operator of intrastate natural gas pipelines, natural gas gathering and processing facilities, NGL transportation and fractionation assets, and salt dome natural gas and NGL storage facilities.

Investor Notice

Enterprise and GulfTerra have filed a joint proxy statement/prospectus and other documents with the Securities and Exchange Commission. Investors and security holders are urged to read carefully the joint proxy statement/prospectus, because it contains important information regarding Enterprise, GulfTerra and the merger and related transactions. The joint proxy statement/prospectus and proxy card will be mailed to security holders of Enterprise and GulfTerra seeking their approval of the merger transactions. A copy of the joint proxy

statement/prospectus and other documents containing information about Enterprise and GulfTerra, can be obtained without charge, at the SEC's web site at www.sec.gov. Copies of the joint proxy statement/prospectus and the SEC filings that are incorporated by reference in the joint proxy statement/prospectus may also be obtained for free by directing a request to: Enterprise Products Partners L.P., 2727 North Loop West, Houston, TX 77008-1044, attention: Investor Relations (713) 880-6812; or GulfTerra Energy Partners, L.P., 4 Greenway Plaza, Houston, TX 77046, attention: Investor Relations (832) 676-5315.

Enterprise unitholders who have voting and other procedural questions about their meeting should contact Mellon Investor Services LLC, which is acting as information agent for Enterprise, as follows:

Mellon Investor Services LLC 85 Challenger Road Ridgefield Park, NJ 07606 Toll-Free: (888) 566-9471

GulfTerra unitholders who have voting and other procedural questions about their meeting, should contact D.F. King & Co., Inc., which is assisting GulfTerra in the solicitation of proxies, as follows:

D.F. King & Co., Inc. 48 Wall Street New York, NY 07606 Toll-Free: (800) 487-4870

Enterprise and GulfTerra, and the officers and directors of their respective general partners may be deemed to be participants in the solicitation of proxies from their security holders. Information about these persons can be found in Enterprise's and GulfTerra's Annual Reports on Form 10-K and Form10-K/A, respectively, and other documents that have been filed with the SEC. Additional information about such persons may also be obtained from the joint proxy statement/prospectus.

Cautionary Statement Regarding Forward-Looking Statements

SAFE HARBOR STATEMENT — Enterprise Products Partners L.P.

This press release contains various forward-looking statements and information that are based on Enterprise's beliefs and those of its general partner, as well as assumptions made by and information currently available to them. When used in this press release, words such as "anticipate," "project," "expect," "plan," "goal," "forecast," "intend," "could," "believe," "may," and similar expressions and statements regarding the contemplated transaction and the plans and objectives of Enterprise for future operations, are intended to identify forward-looking statements.

Although Enterprise and its general partner believe that such expectations reflected in such forward-looking statements are reasonable, neither it nor its general partner can give assurances that such expectations will prove to be correct. Such statements are subject to a variety of risks, uncertainties and assumptions. If one or more of these risks or uncertainties materialize, or if underlying assumptions prove incorrect, actual results may vary materially from those Enterprise anticipated, estimated, projected or expected. Among the key risk factors that may have a direct bearing on Enterprise's results of operations and financial condition are:

- fluctuations in oil, natural gas and NGL prices and production due to weather and other natural and economic forces;
- a reduction in demand for its products by the petrochemical, refining or heating industries;
- a decline in the volumes of NGLs delivered by its facilities;
- the failure of its credit risk management efforts to adequately protect it against customer non-payment;
- terrorist attacks aimed at its facilities:
- the failure to complete the proposed merger;
- the failure to successfully integrate the respective business operations upon completion of the merger or its failure to successfully integrate any future acquisitions; and
- the failure to realize the anticipated cost savings, synergies and other benefits of the proposed merger.

Enterprise has no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

SAFE HARBOR STATEMENT - GulfTerra Energy Partners, L.P.

This release includes forward-looking statements and projections. GulfTerra has made every reasonable effort to ensure that the information and assumptions on which these statements and projections are based are current, reasonable, and complete. However, a variety of factors, including the integration of acquired businesses, pending merger with a subsidiary of Enterprise Products Partners L.P., status of GulfTerra's greenfield projects, successful negotiation of customer contracts, and general economic and weather conditions in markets served by GulfTerra and its affiliates, could cause actual results to differ materially from the projections, anticipated results or other expectations expressed in this release. While GulfTerra makes these statements and projections in good faith, neither GulfTerra nor its management can guarantee that the anticipated future results will be achieved. Reference should be made to GulfTerra's (and its affiliates') Securities and Exchange Commission filings for additional important factors that may affect actual results.

Contacts:

Enterprise Products Partners L.P. Investor Relations Randy Burkhalter (713) 880-6812 www.epplp.com GulfTerra Energy Partners, L.P. Investor Relations and MLP Finance Drew Cozby (832) 676-5315 www.gulfterra.com

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